



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/635,665

08/07/2003

Hiraku Murayama

029650-144

8895

21839 7590 05/24/2007
BUCHANAN, INGERSOLL & ROONEY PC
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER

HOEKSTRA, JEFFREY GERBEN

ART UNIT	PAPER NUMBER
----------	--------------

3736

MAIL DATE	DELIVERY MODE
-----------	---------------

05/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/635,665

Applicant(s)

MURAYAMA ET AL.

Examiner

Jeffrey G. Hoekstra

Art Unit

3736

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 23-28 is/are pending in the application.
- 4a) Of the above claim(s) 4-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 12-21 and 23-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Notice of Amendment

1. In response to the amendment filed on 2/27/2007, amended claim(s) 1 and 24, and new claims 28 is/are acknowledged. The previous rejections of claims 1-3, 12-21, and 23-28 are withdrawn. The following new and reiterated grounds of rejection are set forth:

Election/Restrictions

2. This application contains claims 4-11 drawn to an invention nonelected with traverse in Paper No. 20051123. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-3, 12, 16-18, 23, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Uchino et al (US 6,001,068, hereinafter Uchino).

6. Uchino discloses a guidewire, comprising:

Art Unit: 3736

- a distally disposed reshapeable and non-superelastic metallic first wire (112,66,81) (the gold or platinum positively recited in column 6 lines 15-19, column 12 lines 29-33, column 15 lines 36-42) capable of being plastically deformed to maintain a desired shape;
- an intermediately disposed pseudo-elastic alloy second wire (A,61) (column 3 line 46 – column 4 line 6) having a smaller elastic modulus than the first wire;
- a proximally disposed third wire (B,62) (column 4 lines 7-25) having a larger elastic modulus than the second wire (the stainless steel for example positively recited in column 4 lines 7-25);
- wherein said first and second wires have a common longitudinal axis, are coaxial, and are joined by spot or butt-resistance welding (column 7 lines 19-67 and column 8 lines 16-22) (as best seen in Figure 12) of the end faces of the two wires in a nearly perpendicular orientation with respect to the longitudinal axis;
- wherein the second and third wire are joined to each other by spot or butt-resistance welding (column 7 lines 19-67 and column 8 lines 16-22) as best seen in Figures 1-4, 9-15, and 17-19; and
- wherein the guidewire has a taper extending from the proximal end to the distal end, as best seen in Figures 9, 14, and 17.

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 3736

8. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchino et al. Uchino et al discloses the claimed invention but does not disclose expressly the first wire ranging in length from 10 to 1,000 mm. It would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the first wire of the guidewire as taught by Uchino et al with the claimed length range, because Applicant has not disclosed that disclosed length provides an advantage, is used for a particular purpose, or solve a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the distal most wire as taught by Uchino et al, because it configures the distal region of a guidewire for navigating tortuous vasculature and since it appears to be an arbitrary design consideration which fails to patentably distinguish over Uchino et al. Therefore, it would have been an obvious matter of design choice to modify Uchino et al to obtain the invention as specified in the claim(s).

9. Claims 19-21 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchino in view of Palermo et al (US 5,769,796, hereinafter Palermo). Uchino discloses the claimed guidewire, as set forth above, except for explicitly disclosing configuring the guidewire with a spiral coil covering at least the distal end portion of the first wire, wherein the welded portion between first and second wires is located distal or proximal the proximal end of the spiral coil. Palermo teaches configuring a guidewire (100) with a spiral coil of wire (132) covering at least the distal end portion of a first wire, wherein a welded portion (128) between a first (126) and a second wire (106) is located distal or proximal the proximal end of the spiral coil (as

Art Unit: 3736

best seen in Figures 5A and 5B). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the guidewire as taught by Uchino, with the guidewire as taught by Palermo for the purpose of configuring the mechanical properties (i.e. flexibility, elastic modulus, etc...) of a guidewire for navigating tortuous vasculature.

Response to Arguments

10. Applicant's arguments with respect to claims 1-3, 12-21, and 23-28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 3736

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey G. Hoekstra whose telephone number is (571)272-7232. The examiner can normally be reached on Monday through Friday, 8:00 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max F. Hindenburg can be reached on (571)272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JH

JH

Max F. Hindenburg
MAX F. HINDENBURG
SUPERVISOR, EBC EXAMINER
EBC CENTER 3700